

AMENDMENTS TO THE SPECIFICATION

Please amend the SUMMARY OF THE INVENTION as follows:

~~A portable computing/electronic device includes a reduced set of keyboard character/function keys. A first set of keys are provided as character entry keys. Each key position corresponds to one character of a selected set characters. Character subsets are selectively chosen by the user during character entry. A second set of keys (control buttons) provide for the selection of which set of characters will be represented by the character key positions in addition to other functions such as case shift, and alpha-numerical control functions. In the preferred embodiment, the first set of keys are actuated by the user's fingers and the second set with the thumbs. The keys are arranged in various configurations including use of side surfaces or simultaneous use of two differing surfaces. In a further embodiment, the sets of characters are the characters in a selected row of a conventional QWERTY keyboard. The control buttons provide for selection of which row of the traditional QWERTY keyboard is associated with the character key positions along with other control functions. In order to provide visual feedback, the selected set of characters is shown on a display.~~

~~——— In an alternate embodiment, the key positions are implemented utilizing LCD elements with pressure sensors located in the corresponding key locations. The characters associated with the character entry keys are displayed directly on the corresponding key positions.~~

~~——— In a further embodiment, the electronic device is a wristwatch. Half of the keyboard, i.e. five character keys and associated control keys, are implemented on a flexible assembly. The assembly is stored beneath the band of the wrist watch. When the keyboard is to be used for input, it is pivotally folded out from under the band and laid across the user's hand. The other~~

~~hand is then utilized to input the desired information. Alternatively, two flex assemblies are utilized and when the watch is placed on a surface, both hands are utilized to perform input.~~

~~— In a further embodiment, the electronic device is a portable phone, such as a cellular phone.~~

~~As in the wristwatch embodiment, one or two members having character and control keys implemented thereon are attached to the phone. Preferably, these members are permanently attached to the phone and rotate outwards in a manner similar to the keyboard of the wristwatch such that they are positioned at 90 degrees to the length of the phone. Input is performed using both hands in the case two members are provided, or is performed using a single hand in the case only one member is provided.~~

~~— In a further embodiment, the electronic device is a portable phone, such as a cellular phone, where, instead of permanently attached or externally attachable members having the character keys and control keys implemented thereon, the keys are placed on the sides of the phone. Preferably, the character keys are placed on one side of the phone while the control keys are placed on the side opposite thereof, although other arrangements are envisioned. Character input is performed by the users fingers, while the thumbs are used to actuate the control keys. Ideally, the phone display is rotatable 90 degrees from its normal position so as to be in the correct orientation for viewing by the user.~~

The present invention, in one embodiment, provides for an electronic appliance having an input/output device, wherein the appliance comprises: a display displaying a selected set of input characters, a wrist band connected to the display for securing it to the wrist of a user, and a flexible assembly operatively connected to the display, wherein the flexible assembly has a set of character keys located thereon. In this embodiment, each of the character keys are associated

with an individual character of the selected set of input characters and at least one control key, and the selected set of input characters comprises a single row of characters from a set of keyboard rows. Further, in this embodiment, the actuation of any of the characters keys causes the character associated with the actuated key to be input into said device and actuation of the control key causes the currently selected set of input characters to be changed to a different set of input characters. Also, in this embodiment, the flexible assembly is pivotal from a position where the assembly extends substantially along and underneath the wristband to a position substantially perpendicular to said wristband.

The present invention, in another embodiment, provides for a portable phone including a housing having top and bottom surfaces and a plurality of side surfaces connecting said top and bottom surfaces and a reduced set character entry system, wherein the portable phone comprises: a display located on said top surface and an input assembly operatively connected to the portable phone. In this embodiment, the input assembly is externally attachable to the portable phone, and the input assembly has a set of character keys located thereon, with each of the character keys being associated with an individual character of a selected set of input characters, and the selected set comprises a single row of characters from a set of keyboard rows and at least one control key. In this embodiment, the actuation of any of the characters keys causes the character associated with said actuated key to be input into the device and the actuation of the control key causes the currently selected set of input characters to be changed to a different set of input characters.

The present invention, in another embodiment, provides an electronic appliance including a housing having top and bottom surfaces and a plurality of side surfaces connecting the top and bottom surfaces and a reduced set character entry system, wherein the electronic appliance comprises: a first set of input keys and at least one selection key. In this embodiment, the first set of input keys are located on any of the side surfaces, with the set of input keys arranged in a single row, and each of the input keys associated with an individual character of a first subset of a set of input characters, and the set of input characters comprises a row from a set of keyboard rows, wherein the actuation of any of the input keys causes the character associated with the actuated input key to be input to said electronic appliance. In this embodiment, the at least one selection key is located on any of said side surfaces, wherein actuation of the selection key changes the first subset to a second subset so that each of the input keys is associated with an individual character of the second subset. In this embodiment, the input keys and the selection key are located on different ones of the side surfaces.

The present invention, in another embodiment, provides for an electronic appliance including a housing having top and bottom surfaces and a plurality of side surfaces connecting the top and bottom surfaces and a reduced set character entry system, wherein the electronic appliance comprises: a first set of input keys located on any of said side surfaces, at least one selection key located on any of the side surfaces, and a display located on said top surface. In this embodiment, the first set of input keys are arranged in a single row, with each of the input keys being associated with an individual character of a first subset of a set of input characters, and the set of input characters comprises a row from a set of keyboard rows, wherein an actuation of any of the input keys causes the character associated with the actuated input key to

be input to the electronic appliance. In this embodiment, the actuation of the selection key changes the first subset to a second subset so that each of said input keys is associated with an individual character of the second subset. Further, in this embodiment, information displayed on the display is rotatable to be in an orientation appropriate for viewing by a user utilizing said input keys.

The present invention, in another embodiment, provides for an electronic appliance including a housing having top and bottom surfaces and a plurality of side surfaces connecting the top and bottom surfaces and a reduced set character entry system, wherein the electronic appliance comprises: a first set of input keys located on any of the side surfaces and at least one selection key located on any of said side surfaces. In this embodiment, the set of input keys are arranged in a single row, with each of the input keys being associated with an individual character of a first subset of a set of input characters, and the set of input characters comprises a row from a set of keyboard rows, and actuation of any of the input keys causing the character associated with the actuated input key to be input to the electronic appliance. In this embodiment, actuation of the selection key changes the first subset to a second subset so that each of the input keys is associated with an individual character of the second subset, and an equal number of input keys and selection keys are located upon the first one and second one of the side surfaces, wherein at least one key of the set of input keys acts as a selection key and at least one selection key acts as an input key as a result of switching between dominate hand modes.

Please amend the ABSTRACT as follows:

A keyboard type input device has multiple key positions provided as character entry keys. Each key corresponds to one key in the selected row of the conventional QWERTY keyboard. A second set of control buttons provide for the selection of which row of a conventional QWERTY keyboard are represented by the character keys in addition to other functions such as case shift, and alpha-numerical control functions. A selected row is shown on a display, as visual feedback. Alternatively the keys are implemented as LCDs with pressure sensors and the characters of the selected row are displayed directly on the corresponding key positions. The keyboard finds particular use in portable devices as it demands less space than traditional keyboards. ~~One embodiment utilizes the keyboard as a wrist watch I/O device.~~ The keyboard type input device is implemented with various electronic appliances, including portable phones.